

Guidelines for R&D Permit

Application for PCB Disposal

by Non-thermal Alternative Methods

The purpose of a research and development (R&D) permit is to assist the facility operator in bringing the destruction process from conception to commercial operation. R&D permits can be issued for bench-scale operations, for pilot-scale systems, and for full scale commercial systems. First-time applicants who do not have experience operating their systems, or who have not yet used their systems to destroy PCBs, are encouraged by EPA to obtain an R&D permit for "shakedown" of the process by conducting studies on a limited quantity of PCBs, prior to the commercial demonstration test.

An R&D permit application should consist of all of the applicable elements described in Table 4 (except as noted). The R&D application need not contain the detail required for an operating permit, but must be sufficient to demonstrate that the R&D activity will not present an unreasonable risk of injury to health or the environment. The applicant should also supply information on the specific objectives of the R&D activity.

The R&D activity should provide process information and operating experience for application for an operating permit. The R&D results should be used for planning a full-scale demonstration such that there is a high probability of a successful demonstration. The R&D results may be appropriate for inclusion in the application for the operating permit.

R&D permits can be issued by the appropriate EPA Regional Administrator for the destruction of a total of 500 pounds or less of PCB-containing material (regardless of the PCB concentration), or by the Division Director of Exposure Evaluation Division of the Office of Toxic Substances (DD/EED), for the destruction of more than 500 pounds of PCB-containing material. R&D permit applications can be submitted at any time, even if an application for a permit to operate commercially has already been submitted.

Upon receipt of an R&D permit application, EPA will review the document. If the application is incomplete or contains deficiencies, a notice of deficiencies will be sent to the applicant, who must then revise and resubmit the application. In some cases EPA/OTS may recommend that the applicant submit an operating permit application in lieu of the R&D permit application, depending on the circumstances involved. When a complete R&D application is approved by EPA/OTS, an R&D permit is issued.

According to 40 CFR 761.60(f), before commencing R&D work, a 30-day notice must be given to EPA regional, state and local offices. After completion of the R&D activities, a report giving the results must be submitted to EPA.

Table 4. Format for Permit Applications for Alternative Method of PCB Destruction

i	Permit Cover
ii	Table of Contents
I.	Summary
II.	Project Organization
III.	Waste Description
IV.	Process Engineering Description
V.	Sampling and Monitoring Plan
VI.	Sampling Procedures
VII.	Sample Analysis Procedures
VIII.	Monitoring Procedures
IX.	Waste Handling and Disposal
X.	Data Reporting/Recordkeeping
XI.	Inspection Procedures
XII.	Spill Prevention Control and Countermeasure Plan
XIII.	Safety Plan
XIV.	Training Plan
XV.	Demonstration Test Plans ^a
XVI.	Test Data or Engineering Performance Calculations
XVII.	Other Permits/Approvals
XVIII.	Schedule of Preoperation Events
XIX.	Quality Assurance Plan
XX.	Standard Operating Procedures
XXI.	Closure Plan

^aFor a research and development application, this section would present the planned research activities.